

DERWENT-ACC-NO: 1998-442864  
DERWENT-WEEK: 199838  
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TITLE: X-ray detector for irradiation alarm device - has  
heat shrinking tube  
on outer surface of optical detection pipe to cut off UV  
from projection on  
pipe

PATENT-ASSIGNEE: HAMAMATSU PHOTONICS KK[HAMM]

PRIORITY-DATA: 1996JP-0348392 (December 26, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES	MAIN-IPC	
JP 10186042 A	July 14, 1998	N/A
006	G01T 001/185	

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
JP10186042A	N/A	1996JP-0348392
December 26, 1996		

INT-CL\_(IPC): G01T001/185; G01T007/00 ; H01J047/02

ABSTRACTED-PUB-NO: JP10186042A

BASIC-ABSTRACT: The detector (2) consists of a glass bulb  
(10a) containing  
discharge gas. A metallic anode (10b) and cathode (10c)  
are arranged  
adjacently in the bulb.

An optical detection pipe (10) sensitive to UV and X-ray  
encloses the anode and  
the cathode. A heat shrinking tube (12) is provided to  
contact with the outer  
surface of the optical detection pipe. UV light projected  
on the optical  
detection pipe is cut off by the heat shrinking tube.

ADVANTAGE - Enables effective UV cut off even when UV is  
irradiated along with  
X-ray. Enables efficient X-ray detection. Eliminates

incorrect operation due  
to UV. Prevents scattering of glass when light incident  
window fails.  
Improves maintenance stability by fixing X-ray detector.  
Increases shock  
resistance.

CHOSEN-DRAWING: Dwg.1/7

TITLE-TERMS:

RAY DETECT IRRADIATE ALARM DEVICE HEAT SHRINK TUBE OUTER  
SURFACE OPTICAL DETECT  
PIPE CUT ULTRAVIOLET PROJECT PIPE

DERWENT-CLASS: S03

EPI-CODES: S03-G02B2C;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1998-345462

L Number	Hits	Search Text	DB	Time stamp
1	9098	light adj4 pipe	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 09:28
2	719	lpi	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 09:29
3	1394	shrinking adj3 tube	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 09:30
5	0	lpi and (shrinking adj3 tube)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 09:30
4	3	(light adj4 pipe) and (shrinking adj3 tube)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 09:35
6	1066340	pipes	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 09:35
7	120	(shrinking adj3 tube) same pipes	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 09:35
8	11	optical and ((shrinking adj3 tube) same pipes)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:01
9	19590	assembled adj4 parts	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:04
10	10431	assembled adj4 sections	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:05
11	3	(light adj4 pipe) same (assembled adj4 parts)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:05
12	1	(light adj4 pipe) same (assembled adj4 sections)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:05
13	0	lpi same (assembled adj4 sections)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:05

14	0	lpi same (assembled adj4 parts)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:05
15	4	((light adj4 pipe) same (assembled adj4 parts)) or ((light adj4 pipe) same (assembled adj4 sections))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:06
16	57	((light adj4 pipe) and (assembled adj4 parts)) or ((light adj4 pipe) and (assembled adj4 sections))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:07
17	4	(lpi and (assembled adj4 parts)) or (lpi and (assembled adj4 sections))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:07
18	61	((light adj4 pipe) and (assembled adj4 parts)) or ((light adj4 pipe) and (assembled adj4 sections)) or ((lpi and (assembled adj4 parts)) or (lpi and (assembled adj4 sections)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:13
19	98	assembled with (light adj4 pipe)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:14
20	2	assembled with lpi	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:14
21	100	(assembled with (light adj4 pipe)) or (assembled with lpi)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:27
22	19693	concentrator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:27
23	39248	reflective adj4 surface	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:28
24	140	assembled with (reflective adj4 surface)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:29
25	1	(light adj4 pipe) and (assembled with (reflective adj4 surface))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:29
26	0	lpi and (assembled with (reflective adj4 surface))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:29
27	5	concentrator and (assembled with (reflective adj4 surface))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:29

28	6	((light adj4 pipe) and (assembled with (reflective adj4 surface))) or (concentrator and (assembled with (reflective adj4 surface)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:30
29	432	(reflective adj4 surface) same assembled	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:31
30	10	(light adj4 pipe) and ((reflective adj4 surface) same assembled)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:31
31	0	lpi and ((reflective adj4 surface) same assembled)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:31
32	17	concentrator and ((reflective adj4 surface) same assembled)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:31
33	27	((light adj4 pipe) and ((reflective adj4 surface) same assembled)) or (concentrator and ((reflective adj4 surface) same assembled))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:36
34	956	(light adj4 pipe) and (reflective adj4 surface)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:36
35	10	lpi and (reflective adj4 surface)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:36
36	2504	DMD	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:37
37	764	DMD with display	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:37
38	16	(light adj4 pipe) and (DMD with display)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:48
39	0	lpi and (DMD with display)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:42
40	24	(light adj4 pipe) and DMD	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:56
41	503	362/26[ccls]	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 10:57

42	0	362/32[ccls]	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 11:00
43	106	362/581[ccls]	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 11:09
48	593	362/551[ccls]	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 11:09
49	164	362/559[ccls]	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 11:10
50	93	362/560[ccls]	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 11:10
51	73	362/561[ccls]	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 11:10
52	863	362/551[ccls] or 362/559[ccls] or 362/560[ccls] or 362/561[ccls]	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 11:10
53	0	assembled and (362/551[ccls] or 362/559[ccls] or 362/560[ccls] or 362/561[ccls])	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 11:10
54	101	assembled and (362/551[ccls] or 362/559[ccls] or 362/560[ccls] or 362/561[ccls])	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/06/14 11:18
55	1	("5005944").PN.	USPAT	2002/06/14 11:18